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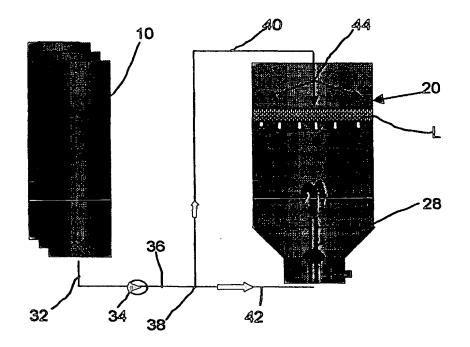
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(54) Title: METHOD AND APPARATUS FOR TREATING PULP

(57) Abstract

The present invention relates to a method and apparatus for treating pulp in connection with a blow tank or a storage tank. A characteristic feature of the method and apparatus for treating pulp according to a preferred embodiment of the invention is that the pulp is discharged from a batch digester (10) and fed either to the upper or the lower part of a so-called blow tank (20), depending on the consistency of the pulp being discharged from the digester (10).



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A. CLASSIFICATION OF SUBJECT MATTER IPC7: D21C 7/08, D21C 9/00, D21D 5/28 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC7: D21C, D21D Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched SE,DK,FI,NO classes as above Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X 1,2,4,8-10, WO 9739181 A1 (AHLSTRÖM PUMPUT OY), 23 October 1997 (23.10.97), page 1, line 3 - line 21; page 12, line 27 - line 33, 14,15 figures 1-4, abstract, claims X FI 94442 B (A. AHLSTROM CORPORATION), 31 May 1995 10-13 (31.05.95), figures 1,2, claims 1-13, abstract WO 9309059 A1 (KAMYR AB), 13 May 1993 (13.05.93), A 1 - 18abstract Further documents are listed in the continuation of Box C. See patent family annex. Special categories of cited documents: later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention document defining the general state of the art which is not considered to he of particular relevance erlier document but published on or after the international filing date document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive document which may throw doubts on priority claim(s) or which is step when the document is taken alone cited to establish the publication date of another citation or other special reason (as specified) document of particular relevance: the claimed invention cannot be "O" considered to involve an inventive step when the document is combined with one or more other such documents, such combination document referring to an oral disclosure, use, exhibition or other means heing obvious to a person skilled in the art document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 1 4 -06- 2000 <u>23 May 2000</u> Name and mailing address of the ISA/ Authorized officer Swedish Patent Office Box 5055, S-102 42 STOCKHOLM Ulf Nyström/ELY Facsimile No. +46 8 666 02 86 Telephone No. +46 8 782 25 00

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Patent document cited in search report	Publication date	Patent family member(s)		Publication date	
WO 9739181 A1	23/10/97	AU EP FI FI FI	2570397 A 0912796 A 11 B 100011 B 961692 D	07/11/97 06/05/99 15/08/97 00/00/00 00/00/00	
FI 94442 B	31/05/95	FI	924805 A	24/04/94	
WO 9309059 A1	13/05/93	AT AU AU BR CA DE EP SE ES FI JP NO NO RU SE US	137722 T 658948 B 2930692 A 9206702 A 2122608 A 69210623 D 0610403 T 2086776 T 942047 A 7500798 T 302164 B 941491 A 2099127 C 469277 B 9103266 A 5640994 A	B 17/08/94 3 01/07/96 04/05/94 26/01/95 02/02/98 22/04/94 20/12/97	